

Remarks

The non-final Office Action dated October 18, 2007 has been reviewed and the following remarks are made in response thereto. In view of the following remarks, Applicants respectfully request reconsideration of this application and timely allowance of the pending claims. Written support for the claim amendments is found throughout the specification and in the original claims, thus Applicants submit that no new matter has been added.

Drawings

The examiner has required that drawings be submitted that are separate from the specification. In response, Applicants have submitted the required drawings.

Rejection under 35 U.S.C. § 102(e)

Claims 1, 2, 22-25, 28-31 and 34-39 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent 7,038,113 (Dixon *et al.*).

Without acquiescing to the merits of the Examiner's rejection and solely to expedite prosecution, Applicants have amended the claims to further define the claimed invention. The amended claims provide for amino acid sequences of the claimed chalcone reductase, chalcone isomerase and isoflavone synthase. The amended claims also provide for nucleotide sequences encoding a chalcone reductase, a isoflavone synthase, and a chalcone isomerase. The amendments are fully supported by the original disclosure and no new matter has been added.

The Examiner alleges that the cited reference teaches the production of daidzein in plants transformed with isoflavone synthase, chalcone reductase and chalcone isomerase, and also alleges that isoflavone synthase, chalcone reductase and chalcone isomerase encoding polynucleotides were known in the art. For at least the following reasons, Applicants respectfully request that the rejection be withdrawn because the reference fails to disclose each and every feature of the claimed invention.

In particular, the cited reference fails to disclose a plant active specifically in flavonol and anthocyanin biosynthesis, as required by the claims. The reference also fails to disclose the claimed genetically modified plant or part thereof, wherein the plant or part thereof is active in flavonol and anthocyanin biosynthesis and comprises one or more nucleotide sequences encoding a chalcone reductase comprising the amino acid of SEQ ID NO: 2 or a fragment thereof with chalcone reductase activity and one or more nucleotide sequences encoding an isoflavone synthase comprising the amino acid sequence

of SEQ ID NO: 4 or a fragment thereof with of isoflavone synthase activity. The reference also fails to disclose a genetically modified plant or part thereof that comprises one or more nucleotide sequences encoding a chalcone isomerase comprising the amino acid sequence of SEQ ID NO: 6 or a fragment thereof capable of catalysing the conversion of 4,2'4'-trihydroxchalcone to 7,4'-dihydroxyflavanone.

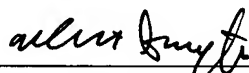
The cited reference also fails to disclose the claimed genetically modified plant or part thereof, wherein one or more nucleotide sequences encoding a chalcone reductase comprises SEQ ID NO: 1, one or more nucleotide sequences encoding an isoflavone synthase comprises SEQ ID NO: 3, and wherein one or more nucleotide sequences encoding a chalcone isomerase comprises SEQ ID NO: 5. Moreover, the reference fails to disclose a nucleic acid that hybridizes to any of the claimed nucleotide sequences under the claimed hybridization conditions. For at least these reasons, Applicants respectfully request that the rejection be withdrawn because the reference fails to disclose each and every feature of the claimed invention.

Conclusion

Except for issues payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: **January 18, 2008**
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Respectfully submitted
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